

# ➤ Introduction to E-Government

## Exercise 01

Group 05

30.04.2023

Group Members:

Emal Ismail  
Vidusha Silva  
Deepika Jha

# Agenda

- E-Government Project at Federal Government Level
  - About the project: LifeSG
  - Key features of LifeSg
  - Relevant Actors
  - Digital Technologies Involved
- E-Government Project at Municipal Level
  - About the project: Digital Post
  - Key features of Digital Post
  - Relevant Actors
  - Digital Technologies Involved
- E-Government Project involving cross-border public provisioning
  - About the project: Europeana
  - Public Services of Europeana
  - Relevant Actors
  - Digital Technologies Involved

# E-Government project at Federal Level

## About the project : LifeSG (Singapore)

- Initially launched in 2018 as 'Moments in Life'
- Rebranded in 2020 as 'LifeSG' to provide one stop access to more than 100 government services and information for citizens
- Facilitate the citizens to easily access Government services, keep up with latest news and updates and to track their applications
- More than 1.2 million users at the end of August 2022

# Key Features of LifeSG

- Navigate various features
  - Helps to connect with more than 100 government services. Information is grouped as important occasions and everyday tasks for easy access to the users
    - Important occasions: Registering child's birth, Legacy planning
    - Day-to-day activities: Making an appointment with government agents, Reporting neighborhood problem
- Create personalized Dashboards
  - Ability to personalize the Dashboard to receive the information based on the preferences
- Eligibility checkers and calculators
- Profile with inbox and appointment functionality

# Relevant Actors

- End users: Singaporean citizens
- Key E-Government interactions
  - Government to Government - G2G
  - Government to Citizens - G2C



# Digital Technologies Involved

- Mobile App is introduced to the users both in Android and iOS platforms with enabled security features
  - Eg: Encryption, mandating Singpass login
- Application Development
- IoT
- APIs
- Digital Infrastructure
- Cybersecurity

## References:

- <https://www.smartnation.gov.sg/initiatives/strategic-national-projects/lifesg>
- <https://www.life.gov.sg/> (Intro to Project)
- <https://www.unapcict.org/sites/default/files/2019-01/E-Government-Strategies-Asia-Pacific.PDF>
- <https://assets.life.gov.sg/lifesg/factsheets/lifesg-employment-support-guides.pdf>

# E-Government Project at municipal/ Local Government level

The Denmark government's Digital Post (Borger.dk) is a web-based online public information system that enables Danish Citizens to securely receive and send digital mail to public authorities on the municipal/public government level.[1] Digital Post is used by 94% of the Danish population.

I have selected a local system from Denmark as the country is a pioneer in E-Government. Additionally, Denmark has the highest number of people using digital government services across the European Union, with 92% internet users using digital public services in 2021. [2]

*(2021, Denmark in the Digital Economy and Society Index)*

Denmark's success in implementing public information systems at the local level is due to its decentralized government structure.

# What public service is provided online and to whom?

## Main Services:

- Receive digital mail from public authorities.
- Write to public authorities.

The services is provided by the public sector to the Danish citizens.

The Legislation makes it mandatory/obligatory for Businesses and Citizens to read the posts, meaning posts sent through Digital Post services have legal effect.

## Additional specific Functions:

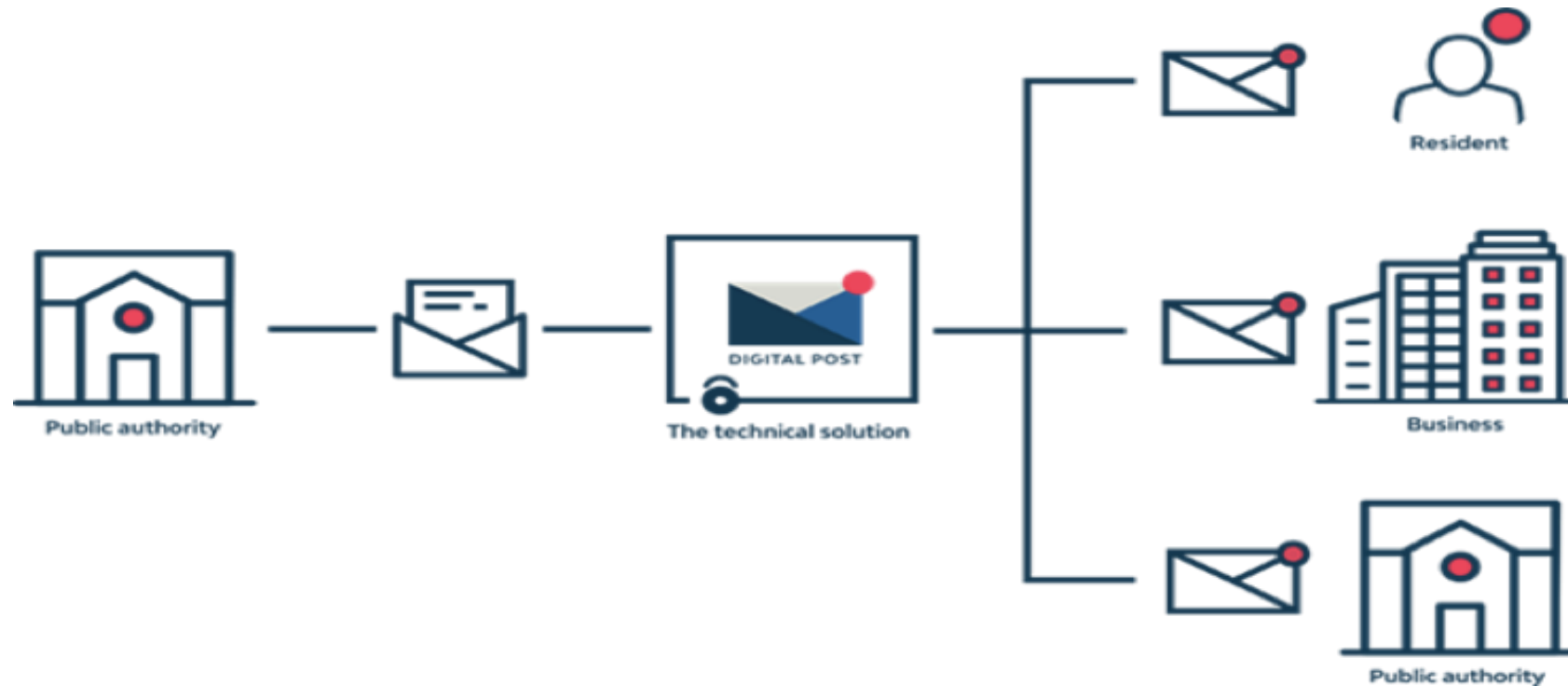
- Notification of new mail by SMS or e-mail
- NemSMS service messages
- Read access to your or other people's mail
- Forward mail to Digital Post recipients
- View and remove devices where you have installed the Digital Post app.



# Who are the relevant actors?

In general, we can see three types of E-Government interaction in this system: Government to Government (G2G), Government to Businesses (G2B), and Government to Citizens (G2C).

Hence, the stakeholders of this system include the public sector (local government), private sector (businesses), and citizens (residents of Denmark).



(Queue.it, 2023) [2]

# What digital technologies are involved?

- The digital post uses a web-based portal. It uses end-to-end Encryption, meaning that only the sender and the receiver have accessed the content of the mail.
- The digital post is also available on Android and IOS mobile devices.
- Evidently, the programming languages of Java, .Net, and PHP have been used to develop the web-based platform.
- The databases used in the digital post might be Oracle, Microsoft SQL Server, and MySQL considering the encryption security of the Digital Post.

The Digital post is supported by supplemental digital platforms such as E-Boks for receiving and sending mail from/to businesses. It is a supplementary platform which is used as a secure digital mailbox and communication platform for exchanging and accessing posts from the Digital Post platform. [4]

## References:

- [1] <https://www.borger.dk/internet-og-sikkerhed/digital-post/Post>
- [2] <https://queue-it.com/blog/government-digital-transformation-denmark/>
- [3] <https://digital-strategy.ec.europa.eu/en/policies/desi-denmark>
- [4] <https://corporate.e-boks.com/da/om-e-boks/>

# E-Government Project involving Cross-Border Public Service Provisioning

## About the project : Europeana

- Europeana is part of the EU's Digital Single Market strategy
- A digital e-government initiative that promotes cross-border access to cultural heritage resources across Europe
- It allows users to search and access digitized books, artworks, and archives from different European countries

# Key Features and Services of Europeana

- Digital Records of over 50 million cultural and scientific artefacts from more than 3,000 institutions across Europe.
- Online Service - Citizens and businesses can search, save and share unique art, books films and music from thousands of cultural heritage.
- Users can create free account and access the wide collection of art, newspapers, archaeology, fashion, science, sport, and much more.
- Europeana collects contextual information – or metadata – about the items, including a small picture. Users search this contextual information. Once they find what they are looking for, if they want to access the full content of the item, they can click through to the original site that holds the content

# Relevant Actors

- **Cultural heritage institutions:** Libraries, museums, and galleries across Europe to digitize their collections and make them accessible online.
- **Researchers:** Europeana collaborates with researchers to develop new tools and methods for analyzing and visualizing cultural heritage data.
- **Policy makers:** Key actors as they provide suggestions for policies and funding and support in development of digital infrastructure at Europeana.
- **Users:** Students, Researchers, Archeologists, Art lovers, Businesses and so on

# Digital Technologies Involved

- Artificial intelligence and machine learning - to improve the discovery and accessibility of cultural heritage materials
- APIs and Web Services – To enable developers to build new applications based on Europeana's digital collections
- Contentful - Content Management System to store all of the website content at no cost
- Lokalise – a platform to provide local experience to a wide range of global audience
- Data visualization tools: - To create 3D models, timelines, and interactive maps
- Cloudflare Tools – For website performance optimization and safety from online attacks

## References:

- [1] <https://www.europeana.eu/en>
- [2] <https://en.wikipedia.org/wiki/Europeana>
- [3] <https://pro.europeana.eu/>
- [4] <https://www.dnb.de/EN/Professionell/ProjekteKooperationen/Kooperationen/Europeana/europeanainfo.html>





**➤ Thank you for your attention**